

Abstract

An electrical insulation device for bidirectional connecting lines (CTL[0:1], D[0:7]) is proposed which 5 operates reliably at high frequencies and can be integrated easily on a chip.

In accordance with a first embodiment, for the purpose of electrical isolation, two separate optocouplers (311, 312) are provided per bidirectional 10 connecting line. A control unit (33) evaluates the control signals which are output by one of the two circuit units (10, 20), and thereupon activates one of the two optocouplers while the other optocoupler is simultaneously deactivated, in order, in this way, to 15 allow transmission of signals via the associated connecting line in one direction.

In a second embodiment of the invention, only a single optocoupler is provided per bidirectional connecting line. The control unit (33) is provided in 20 this solution as well, except that in this case it changes over the effective direction of the optocoupler by means of corresponding circuit components (32), thereby once again achieving transmission of signals via the associated connecting line in one direction.

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Figure 3

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